

REMARKS

Claims 1-9 and 13-27 are pending in this application. By this amendment, claims 1, 15, 16, and 25 have been amended. Reconsideration and allowance of claims 1-9 and 13-27 are respectfully requested.

Rejection of Claims 1-7, 9, 13-18, 20, and 23-27 Under 35 U.S.C. § 103(a) Over Cragun

Claims 1-7, 9, 13-18, 20, and 23-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,804,803 to Cragun et al. (hereinafter, "Cragun"). This rejection is respectfully traversed.

There are four independent claims currently pending: claims 1, 15, 16, and 25 (hereinafter, the "pending independent claims"). Independent claims 1 and 15 both relate to an optical scanning system for scanning graphical codes. Independent claim 16 relates to a process for optically scanning graphical codes. Independent claim 25 relates to a process for printing a graphical code onto an object. Each of the pending independent claims has been amended to recite, in pertinent part, a "two dimensional graphical code" comprising "an encoded Internet address and additional information." Support for the limitation that the graphical code includes "additional information" may be found in the specification on, for example, page 6, line 14 through page 7, line 6.

Cragun discloses "a client computer with a scanner capable of scanning objects for a code. The client computer scans the object of interest and translates the code into a URL that specifies both the server computer and the location within the server of information that is relevant to the object." Cragun, col. 2, lines 11-16. The URL points to a document 174 that "contains information related to [the] object." Cragun, col. 5, lines 30-31. Thus, Cragun

discloses an object having a code that only includes a URL. In contrast, the pending independent claims recite a graphical code that includes both "an encoded Internet address and additional information."

Cragun also discloses a "scanned code 117 [that] represents a Universal Product Coding (UPC) symbol *rather than* a URL string or an abbreviated URL string." Cragun, col. 7, lines 29-31 (emphasis added). When the code is scanned, a product database 136 is accessed. The product database 136 includes "URL information 325, which can be used to provide information about the product." Cragun, col. 7, lines 37-38. Thus, Cragun also discloses an object having a code that only includes a UPC symbol. This is once again in contrast to the pending independent claims, in which the graphical code includes both "an encoded Internet address and additional information."

A graphical code that includes "an encoded Internet address and additional information" possesses significant advantages over the codes disclosed in Cragun. Such advantages are readily apparent in a sales context, where the graphical code may be placed on an object that is offered for sale. In such a situation, the encoded Internet address may correspond to a web site maintained by a manufacturer or distributor of the object offered for sale. The additional information may include information about the object on which the graphical code is placed, the store where the object is offered for sale, the equipment used to manufacture the object, and so forth. When the graphical code is scanned, the additional information may be sent to the Internet address included in the graphical code. Such information may then be used by the manufacturer/distributor to determine customer satisfaction, marketing demographics, product reliability, or the like. Of course, this is just one of many examples of the different ways that the additional information in the graphical code may be used.

In addition, as the Examiner correctly points out, Cragun does not disclose or suggest a "two dimensional graphical code," as recited in the pending independent claims. Rather, in Cragun the "scanning device 118 is a laser scanning bar code reader and [the] code 117 is a bar code." Cragun, col. 4, lines 8-9. This difference between Cragun and the claimed invention is significant, because the storage capacity of a "two dimensional graphical code" is greater than the storage capacity of the bar code disclosed in Cragun. Therefore, using a "two dimensional graphical code" allows both "an encoded Internet address and additional information" to be included in the same code.

The Examiner justifies the rejection in part by concluding that it "would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a two dimensional code instead of a one dimensional code." The Examiner further states that it was "widely recognized in the art" that "two dimensional codes can store more information" than bar codes, and that "for a long Internet address, the two dimensional code can store all the information in a small space...." Applicant respectfully disagrees.

Cragun specifically discusses the problem of storing a long Internet address in a bar code. To solve this problem, Cragun discloses a code that includes an "abbreviated form 220" of the URL. As Cragun states: "URL abbreviated form 220 is advantageous for encoding a URL string in a bar code because of the limited characters per inch which can be encoded in a bar code." Cragun, col. 7, lines 15-17. However, Cragun does not mention the possibility of using a "two dimensional code" to store the URL. If it was "widely recognized in the art" that "two dimensional codes can store more information" than bar codes, as the Examiner contends, surely Cragun would have at least mentioned this possibility.

Even where Cragun discusses alternatives to bar codes, the possibility of substituting a "two dimensional graphical code" is not mentioned. For example, Cragun discloses an "optical character reader that is capable of reading characters printed on object 115." Cragun, col. 12, lines 5-6. Cragun also suggests "magnetic encoding" and "radio frequency tags." Cragun, col. 12, line 7. Cragun even states that "the customer could type numerical digits representing the code on the object instead of scanning the object." Cragun, col. 12, lines 8-10. If it "would have been obvious ... to provide a two dimensional code instead of a one dimensional code," as the Examiner contends, surely Cragun would have mentioned use of a "two dimensional graphical code" along with the other possibilities.

To establish a rejection under 35 U.S.C. § 103(a), all claim limitations must be taught or suggested by the prior art. MPEP § 2143.03. However, as shown above, Cragun does not disclose or suggest a "two dimensional graphical code" that includes "an encoded Internet address and additional information." Accordingly, Applicant respectfully submits that independent claims 1, 15, 16, and 25 are patentably distinct. In addition, claims 2-7, 9, and 13-14 depend directly or indirectly from claim 1, claims 17-18, 20, and 23-24 depend directly or indirectly from claim 16, and claims 26-27 depend directly or indirectly from claim 25. Accordingly, these dependent claims are likewise patentably distinct for at least the same reasons.

Rejection of Claims 8, 19, and 21-22 Under 35 U.S.C. § 103(a) Over Cragun in View of Wellner

Claims 1-7, 9, 13-18, 20, and 23-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cragun in view of U.S. Pat. No. 5,640,193 to Wellner (hereinafter, "Wellner"). This rejection is respectfully traversed.

As explained previously, independent claims 1 and 16 are patentably distinct from Cragun. Wellner, however, does not make up for the deficiencies of Cragun. Wellner discloses "scanner means for reading marks on an object." Wellner, col. 1, lines 36-37. The marks may take the form of "bar codes, alphanumeric characters or Xerox glyphs." Wellner, col. 1, lines 50-51. The marks include information identifying "desired electronic service[s]," such as "movies, movie previews, games," and so forth. Wellner, col. 1, line 42; col. 3, line 48. Thus, like Cragun, Wellner does not disclose or suggest a "two dimensional graphical code" that includes both "an encoded Internet address and additional information," as recited in independent claims 1 and 16.

Claim 8 depends from independent claim 1, and claims 19 and 21-22 depend from independent claim 16. Because independent claims 1 and 16 are patentably distinct from both Cragun and Wellner, these dependent claims are patentably distinct for at least the same reasons.

In view of the foregoing, claims 1-9 and 13-27 are patentably distinct over the cited references. Reconsideration and allowance of claims 1-9 and 13-27 are respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Wesley L. Austin', is written over a horizontal line.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Twice amended) An optical scanning system for scanning graphical codes which are displayed on an object, [to obtain the encoded Internet address for the object] comprising:

an object comprising:

text displayed on the object; and

at least one two dimensional graphical code displayed on the object, [wherein the height of the graphical code is limited in height to the height of the text and] wherein the graphical code comprises an encoded Internet address and additional information;

scanning means for optically scanning the graphical code; and

a computer connected to the scanning means and further comprising processing means for decoding the scanned encoded Internet address and additional information.

15. (Twice amended) An optical scanning system for scanning graphical codes which are displayed on an object, [to obtain the encoded Internet address for the object] comprising:

an object comprising at least one two dimensional graphical code displayed on an object, the graphical code further comprising an encoded Internet address and additional information;
[and]

scanning means for optically scanning the graphical code; [and further comprising]

processing means for decoding the scanned encoded Internet address and additional information; and

memory for storing the [identified] decoded Internet address and additional information.

16. (Twice amended) A process for optically scanning graphical codes which are displayed on an object₂ [to obtain the encoded Internet address for the object] comprising:

providing an object comprising:

text displayed on the object; and

at least one two dimensional graphical code displayed on the object, wherein the graphical code comprises an encoded Internet address and additional information;

[encoding an Internet address onto an object, wherein the object further comprises text;

displaying at least one graphical code onto an object, wherein the height of the graphical code is limited in height to the height of the text;]

optically scanning the graphical code to generate optically scanned data;

[generating optically scanned data;]

transmitting the optically scanned data to a computer for processing; and

processing the optically scanned data to identify the encoded Internet address and additional information. [; and

identifying the encoded Internet address.]

25. (Twice amended) [The] A process of printing a two dimensional graphical code onto an object, wherein [an] the object comprises text₂ and [a two dimensional graphical code printed on the object,] wherein the graphical code comprises an encoded Internet address and additional information [which is limited in height to the height of the text].